

REMARKS

This application has been carefully studied and amended in view of the Office Action dated January 9, 2006. Reconsideration of that action is requested in view of the following.

Claim 1 has been canceled and rewritten as claim 8 in view of the rejection of claim 1 under 35 USC 101. Claim 8 is now a method claim and accordingly does not read on a natural product.

Reconsideration is respectfully requested of the rejection of claims 6 and 7 under 35 USC 101 and under 35 USC 112. Those claims were originally presented as "use" claims. The claims have now been amended to be dependent on claim 8. Accordingly, the claims are now method claims or process claims as suggested by Examiner Arnold.

Claims 2-7 have been carefully reviewed and amended. Claims 8-16 have been added. As noted, claim 8 is a replacement for claim 1 and is now the only independent claim. Remaining claims 2-7 and 9-16 are dependent claims which are now method claims. Claims 2-5 have been amended for consistent terminology with their new parent claim 8. Newly added claim 9 is dependent on claim 8 and adds that the preparation additionally includes an NO source. Claim 10 is directed to the version of original claim 3 wherein the preparation included both xenon and oxygen. It is noted that claims 3-5 and 9-10 are open ended in the sense that the word "comprises" or "comprising" is used to define the components of the preparation. Claims 11-14 have been added which use the words "consists of" to be closed ended as regards the components of the preparation.

Claim 6 has also been amended to delete the optional use of an NO source as a positive requirement of the claim. Instead, that feature has been included in newly added claim 15. Similarly, claim 7 has been amended to delete the optional requirement for an NO source and that feature is now included in newly added claim 16. Claims 6 and 7 have also been amended

from a formal standpoint to refer to the various conditions for which the preparation is used as a Markush grouping.

In view of the amendments made to claims 6 and 7, claims 6 and 7 should now fully comply with 35 USC 112 by deletion of the questioned term "where appropriate".

FISHMAN REFERENCE

It is respectfully submitted that claims 1-3 are not anticipated or made obvious from Fishman (U.S. 5,228,434).

The technical field of Fishman is related to anesthesia wherein a gas is breathed by the patient to achieve the desired effect (Column 1, lines 9,10).

Moreover, the Fishman reference is directed to a method of anesthetizing a patient by providing a combination consisting of three gases, which are xenon, oxygen and helium, as a medicament for the treatment of a patient, i.e. to anesthetize him. (Column 2, lines 16-22).

It is disclosed that oxygen serves to provide life and that xenon acts as the anesthetizing agent (Column 2, lines 61-63). This indicates that oxygen is the gas that could have any protective function in the human body including the brain.

However, the only function of xenon is to anesthetize the patient (column 4, lines 18-22). This means that xenon is used to cause unconsciousness, which is directly bound to a change from a healthy condition to an abnormal or even ill condition in the brain. This may lead even to cerebral disorders.

In the present invention xenon has just the opposite function, namely to protect the brain from disorders and to improve the oxygen supply.

From the above it is clear that the Fishman reference does not teach methods and/or the use of xenon for purposes to protect the cerebrum.

PETZELT REFERENCE

Reconsideration is respectfully requested of the rejection of claims 1-3 as anticipated by Petzelt et al. (WO 00/53192).

As regards Petzelt et al. this reference deals with preparations containing xenon for treating neurointoxications and their use in treating neurointoxications (page 4, penultimate and last paragraph, page 5, paragraph 1 claims 1, 7, 16).

Petzelt et al. describes that there is a need for a preparation which reduces or prevents the damaging effects of uncontrolled neurotransmitter release from neurons, e.g. of dopamine, glutamate or noradrenalin (page 4, 2nd paragraph).

Further, it is disclosed that xenon suppresses reversibly the release of neurotransmitters, which led to the preparation of means for treating cell damage and diseases, which are caused by an increased neurotransmitter release (page 4, penultimate paragraph).

From this the person skilled in the art can draw the following consequences:

1. Neurotransmitters are substances acting in all cells of the whole body,
2. The damaged effect to be treated has already been occurred, so that
3. Xenon is proposed to be used as a therapeutic agent in those cases where the cells are already damaged by released neurotransmitters, particularly caused by a neurotransmitter excess (page 4, last paragraph, penultimate sentence).

The fundamental idea of the Petzelt et al. invention is unequivocally directed to a treatment of an existing disorder. This can also be found throughout the whole specification. For instance on page 6, last line, to page 7, line 3, it is stated that "...xenon treatment, cannot prevent ischemia per se, ...".

In addition, the terms "chronic", e.g. in connection with chronic Parkinson's disease (page 7, last paragraph), or "acute" e.g. in connection with the acute threatening states (page 8, 2nd paragraph), clearly indicates that the Petzelt et al. invention describes the treatment of existing disorders which can affect the body everywhere without any prevalence to a specific site or organ.

By the way all Examples 1 and 2 are carried out under in vitro conditions using isolated cells derived from a pheochromocytoma, which is a tumor of the kidney. However, isolated tumor cells of the kidney have no relation to isolated brain cells, let alone to the whole brain in situ.

For the reasons mentioned above the Petzelt et al. reference cannot anticipate the present invention as now claims, nor make the claims obvious.

BRIEND REFERENCES

Reconsideration is respectfully requested of the rejection of claims 1 and 4-7 as anticipated by Briend, et al. (WO 97/15311) or Briend, et al. (US 5,670,177). Since both of these items of prior art are similar, where references are made in the following discussion to the specification those references are with respect to Briend, et al. (WO 00/53192).

The Briend et al references disclose the use of a combination of nitrogen monoxide (NO) and carbon dioxide (CO₂) for the treatment of ischaemia.

The term or "ischaemia" or "ischemia" defines a site or an area of the human or animal body where the blood supply or the blood stream is interrupted. This event is not specific as to a site of the human or animal body but can affect all possible sites of the body (page 4, lines 33-35).

Further, it is disclosed that the treatment of an embolism is preferred (page 4, lines 26-31), which is a form of ischaemia and means the vascular obliteration cause by a thrombus or the like (page 5, lines 6,7).

Nothing can be taken from Briend et al. that the combination of NO and CO₂, which may contain at least a third gas selected from the group consisting xenon, krypton, azote protoxide and mixtures thereof, can be used for cerebral protection, let alone the use of xenon for this purpose.

Contrary to the disclosure of Briend et al. the present claims are directed to a method to protect the cerebrum, but not to treat “ischaemia” or an embolism.

Therefore, Briend et al. cannot anticipate the invention now claimed.

Since the references do not disclose the invention as described and since the references do not provide any motivation or incentive to carry out the invention according to the present claims, these claims are neither anticipated by the cited prior art nor are they obvious in view of the cited references.

DOUBLE PATENTING

It is noted that the double patenting rejections are “provisional” rejections in that claims have not been allowed in the copending applications. Upon the allowance of such claims applicants will file an appropriate Terminal Disclaimer so as to address the double patenting rejections.

In view of the above remarks and amendments this application should be passed to issue.

Respectfully submitted,

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